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Policies Adopted by the Missouri Clean Water Commission





Policies Adopted by the Missouri Clean Water Commission

In Missouri, the responsibility for water pollution control falls on the Clean Water Commission. The six-member Commission sets water quality goals and policies, which are carried out by the staff of the Department of Natural Resources. Through the Commission, water quality experts, states, and local officials, water treatment professionals and citizens throughout Missouri have a voice in efforts to improve and maintain the quality of the state's waters.

Since 1972, about \$150 million has been spent in the state for water pollution control projects employing thousands of Missouri citizens. The result has been a steady improvement in water quality and a boost for the state's economy.

The Clean Water Commission is to be congratulated for the outstanding work it has done in controlling water pollution. I urge all citizens to support the Commission in its vital work.

Sincerely,

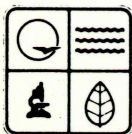
Director of Natural Resources

Fred A. Laiser
Director



MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division of Environmental Quality

Revised July 12, 1979



MISSOURI DEPARTMENT OF NATURAL RESOURCES

P.O. Box 176 Jefferson City, Missouri 65102 (314) 751-4422

Dear Concerned Citizen:

Fortunately, most areas of Missouri have an abundance of clean, refreshing water. However, some waters of the state are so polluted they have been rendered useless and cannot support aquatic life.

Clearly, Missourians must become concerned about the quality of the state's rivers, streams and lakes if future generations are to have adequate supplies of safe usable water. Water pollution, if left unchecked, not only poses a threat to public health, but also can result in irreparable harm to fish and wildlife and can foreclose many recreational opportunities.

In Missouri, the responsibility for water pollution control falls on the Clean Water Commission. The six-member Commission sets water quality goals and policies, which are carried out by the staff of the Department of Natural Resources. Through the Commission, water quality experts, states, and local officials, water treatment professionals and citizens throughout Missouri have a voice in efforts to improve and maintain the quality of the state's waters.

Since 1972, about \$350 million has been spent in the state for water pollution control projects employing thousands of Missouri citizens. The result has been a steady improvement in water quality and a boost for the state's economy.

The Clean Water Commission is to be congratulated for the outstanding work it has done in controlling water pollution. I urge all citizens to support the Commission in its vital work.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Fred A. Lafser
Director

Joseph P. Teasdale Governor
Fred A. Lafser Director

Contents

Introduction	1
74-1 Authorization for Interim Action by Director of Staff	2
75-1 Sewage Works Construction on a Watershed Basis	3
76-1 Construction Grant Awards	4
76-2 Disinfection	5
76-3 Staff Approval of Construction Grant Increase Requests	6
76-4 Conflict of Interest	7
76-5 Fencing of Wastewater Treatment Facilities	8
77-1 Operating Constraints for Facilities Pending Upgrade	9
78-1 Wastewater Irrigation	10
78-2 Grant Eligibility — Tractors and Mowers	12
78-3 Authorization for Director of Staff to Sign Certifications	13
78-4 Grant Eligibility — Locating and Uncovering Manholes	14
78-5 Bridge Crossings	15
79-1 Population Projection Within Designated 208 Areas	16
79-2 Construction Grants Priority System	17

Missouri's water pollution control effort had its beginnings in the early 1950s as a program within the Missouri Division of Health. In 1957, the Missouri Water Pollution Law was passed, creating the six-member Missouri Water Pollution Board. At that time, the emphasis in water pollution control shifted from an emphasis on the health aspects of water pollution — stopping the spread of waterborne diseases that could come from sewage — to a comprehensive consideration of the effects of pollution on fish, wildlife and recreational uses as well.

The Missouri Clean Water Law was passed in 1972 and the board renamed the Clean Water Commission. This law gave the commission greater responsibilities and greater enforcement powers.

In 1972, the Federal Water Pollution Control Act Amendments also were passed, expanding the nation's water pollution control efforts. The Missouri Clean Water Law was revised in 1973 to bring the state program into compliance with the federal law.

The 1972 federal amendments created the National Pollutant Discharge Elimination System (NPDES) permit program, requiring permits for discharges of wastewater into the nation's waters. These NPDES permits are designed to maintain and improve the quality of the nation's waters by limiting the kinds and amounts of pollutants in each discharge.

In October 1974, the Missouri Department of Natural Resources was given control of this permit program within Missouri. Today the six-member Clean Water Commission sets the water pollution control policies which are implemented by the department's staff through planning, plan review, permit issuance, construction grants and enforcement activities.

The policies adopted by the Clean Water Commission serve as guidelines for members of the Commission when making decisions on matters affecting water quality in Missouri. They are designed to provide a uniform, consistent approach to water pollution control in the state by informing the public, wastewater works officials, governmental bodies and the Commission's staff of the direction the Commission will take in its efforts to improve and maintain the quality of the state's waters.

AUTHORIZATION FOR INTERIM ACTION BY DIRECTOR OF STAFF

Missouri Clean Water Commission Policy No. 74-1

Policy

The Commission authorizes the Director of Staff, upon consultation with and affirmative response from four Commission members, to act in its behalf and proceed with positive action on matters of immediate concern where delay may: (1) be harmful to the public interest; (2) cause unnecessary waste of public funds; or (3) impose a significant hardship on a public or private entity. Any action taken shall be regarded as a timely response intended to relieve unnecessary hardships, and shall be confirmed at the next regularly scheduled Clean Water Commission meeting. No known controversial matters will be handled in this manner.

Discussion

The original policy (October 24, 1974) specifically addressed approval for grant increases in order to take advantage of bids that would have lapsed prior to the next scheduled Clean Water Commission meeting. Since the initial policy, there have been periodic occasions where immediate action was highly desirable and authority of the Director of Staff to proceed was questionable.

Effective Date

October 24, 1974

Amended July 12, 1979

Effective Date

February 6, 1975

Amended July 12, 1979

SEWAGE WORKS CONSTRUCTION ON A WATERSHED BASIS

Missouri Clean Water Commission Policy No. 75-1

Policy

It is the policy of the Missouri Clean Water Commission to encourage the planning, design and construction of sewage works on a watershed or regional basis. Where development is insufficient to warrant immediate construction of facilities for the entire watershed or region, interim facilities for a portion of the area will be favorably considered as long as the design is compatible with the ultimate plan. At such time as watershed or regional facilities become available, any existing sub-regional treatment works and/or lift stations are to be taken out of service and the tributary waste flows diverted into the watershed or regional facilities.

Discussion

In the absence of a total watershed plan, sound engineering principles should be followed in locating interim facilities. The physical characteristics, topography, geography, hydrology, areawide sewer districts, and any other factors which would influence a watershed plan for the area should be considered.

Sewers shall in all cases be sized to serve the watershed area tributary to them unless it can be demonstrated to be more cost effective to construct a smaller sewer now, and parallel it at a later date, when development requires its construction.

Effective Date

February 6, 1975

Amended July 12, 1979

CONSTRUCTION GRANT AWARDS

Missouri Clean Water Commission Policy No. 76-1

Policy

No state or federal grant or increase will be awarded to any applicant who is not in compliance with the Missouri Clean Water Commission regulations and/or provisions of a validly issued National Pollutant Discharge Elimination System (NPDES) permit; and further, no grant or increase shall be approved for any applicant who fails to remain in compliance with the Missouri Clean Water Commission regulations and/or provisions of the permit during the upgrading of facilities.

Discussion

It is the position of the Commission that communities that are not in compliance with the regulations and/or permits are not demonstrating a good faith effort to abate water pollution, and will not be eligible for construction grant awards or payments.

Effective Date

March 25, 1976

Amended July 12, 1979

Effective Date

April 22, 1976

Note: This policy is currently under review for proposed modification.

DISINFECTION

Missouri Clean Water Commission Policy No. 76-2

Policy

1. The following are requirements for disinfection of wastewater effluents:
 - A. All discharges to losing streams, as described in 10 CSR 20-7.020 Effluent Regulation, shall not contain more than 200 colonies of fecal coliform per 100 ml.
 - B. Discharges upstream of identified whole-body* contact areas and discharges to low-flow streams within metropolitan areas where the stream is readily accessible to children shall meet the fecal coliform limit of not more than 200 colonies of fecal coliform per 100 ml. during the recreational season (April 1 through September 30).
 - C. Discharges to lakes shall meet the requirements for fecal coliform limits as set out in B above.
 - D. Where chlorine is used as a disinfectant, dechlorination shall be provided except where discharge is:
 1. Into an intermittent dry stream which does not support fish life;
 2. Into a flowing stream where the 7-day Q_{10} flow is equal to or greater than 10 times the effluent flow; or
 3. From a facility designed to treat less than 50,000 gallons per day of wastewater.

Note: The fecal coliform limits set in B or C may be met by holding or irrigation of effluent during the recreational season.

Communities that have existing disinfection facilities will not be required to disinfect unless it is necessary to protect the receiving water as outlined in B or C above.

*"Upstream of whole-body contact area" in B above is defined as follows: The distance the effluent will flow in one day, or 10 miles, whichever is least.

2. Specific limitations regarding dissolved oxygen requirements should be deleted from the effluent regulation. The consulting engineer should evaluate potential dissolved oxygen impact on the receiving stream, and require adequate treatment and/or effluent aeration as may be required to prevent the violation of Missouri Water Quality Standards.

Effective Date

April 22, 1976

Note: This policy is currently under review for proposed modification.

STAFF APPROVAL OF CONSTRUCTION GRANT INCREASE REQUESTS

Missouri Clean Water Commission Policy No. 76-3

Policy

Construction grant increase requests which meet all existing guidelines and regulations of the Missouri Clean Water Commission and the Environmental Protection Agency (totaling \$250,000 or less) will be reviewed and acted upon by the staff until such time as the grant increase reserve fund is reduced to below ten percent of the initial reserve amount (\$2.5 million, FY 76).

Requests for grant increases in excess of ten percent of the original amount, for which only one bid is received, shall also be referred to the Missouri Clean Water Commission for action.

Effective Date

June 30, 1976

Amended July 12, 1979

CONFLICT OF INTEREST

Missouri Clean Water Commission Policy No. 76-4

Policy

Due to the regulatory responsibilities of the Division of Environmental Quality, it is a conflict of interest for staff to specify the design of specific project features, or the method of solving specific problems.

Discussion

Staff is available for discussion and consultation on matters regarding methods of waste treatment; however, they shall not offer services which may be construed as being competitive with private engineering practices. Design services are available in the private sector from professional consulting engineers and from public agencies such as University of Missouri Extension Service, Soil Conservation Service and other agencies not charged with regulatory responsibilities. Design of wastewater treatment facilities and submission of the same are responsibilities of the permit holder or permit applicant.

Effective Date

October 14, 1976

Amended July 12, 1979

FENCING OF WASTEWATER TREATMENT FACILITIES

Missouri Clean Water Commission Policy No. 76-5

Policy

Wastewater treatment facilities of any nature shall be enclosed with a fence and gate equipped with a lock so as to discourage entrance by children. In addition, the fence and gate shall have permanently fastened thereon warning signs containing visual identifications of danger easily recognizable by, and to warn, children of the danger. This policy becomes effective immediately and applies to all facilities proposed or in existence.

Minimum height — five feet. Examples of acceptable fencing are chain link or woven wire.

Effective Date

April 22, 1976

Effective Date

May 27, 1976

Amended June 23, 1977

Amended July 12, 1979

OPERATING CONSTRAINTS FOR FACILITIES PENDING UPGRADE

Missouri Clean Water Commission Policy No. 77-1

Policy

All wastewater treatment plants located within established areawide planning areas, to include without limitations 201, private sewer company boundaries, 208, etc., shall be allowed to continue to operate until such time as sanitary sewers are available, provided:

- A. They are properly operated and maintained;
- B. They are not hydraulically or organically overloaded, i.e., they maintain a BOD level of less than 60 mg/l and a SS level of less than 80 mg/l;
- C. They are within an areawide planning boundary which has a plan approved by the agency in accordance with the applicable Clean Water Commission and Environmental Protection Agency regulations; and
- D. The facility and/or its discharge does not create a nuisance.

Owners of such facilities shall submit a notarized statement that they are going to connect to sewage collection systems within 90 days of their availability.

Effective Date

May 27, 1976

Amended June 23, 1977

Amended July 12, 1979

Discussion

This policy statement is intended to supplement present requirements of the Department of Natural Resources and the document by the University of Missouri entitled "A Guide to Planning and Designing Effluent Irrigation Disposal Systems in Missouri." The University may be contacted for additional technical information such as for toxic metals and cropping programs.

The Missouri Clean Water Commission has adopted Water Quality Standards with sections applicable to ground water from waste irrigation systems. The Water Quality Standards have been published in the State Register and are also available from the Water Pollution Control Program.

There are three basic methods of land application of wastewater. These are: (1) wastewater reuse, which is irrigation for optimum crop production; (2) land treatment, which is the application of the maximum amount of wastewater which can be renovated by the soil plant filter without detrimental effects to surface or ground waters, soils or crops; and (3) overland flow which does not depend upon infiltration into the soil but rather biological activity and ion exchange at the soil surface and on vegetation. Application rates for land treatment and overland flow will generally be several times higher than for wastewater reuse.

WASTEWATER IRRIGATION

Missouri Clean Water Commission Policy No. 78-1

Policy

The Missouri Clean Water Commission encourages the reuse of wastewater effluent for beneficial uses to reduce or eliminate direct discharges to waters of the state. The costs for design and construction of irrigation facilities such as treatment works, holding basins, irrigation equipment and necessary appurtenances will generally be eligible for construction grant participation where the proposed facilities comply with EPA Cost Effectiveness Guidelines. Long-term lease agreement with adjacent landowners to utilize the effluent for crop production will generally be required in lieu of purchase of land by the community. Purchase of land, except in very unusual circumstances, will not be eligible for construction grant participation.

A ground water monitoring program similar to the one outlined in "A Guide to Planning and Designing Effluent Irrigation Disposal Systems in Missouri" will be required for land treatment projects. Monitoring and reporting for wastewater reuse systems will be established on a case-by-case basis, but where acceptable professional assistance in selecting the cropping program has been utilized a yearly report summarizing the activities should suffice.

Discussion

This policy statement is intended to supplement present requirements of the Department of Natural Resources and the document by the University of Missouri entitled "A Guide to Planning and Designing Effluent Irrigation Disposal Systems in Missouri." The University may be contacted for additional technical information such as for toxic metals and cropping programs.

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Missouri Clean Water Commission Policy No. 78-2

Every effort should be made to reach a long term lease agreement or contract to apply wastewater to privately owned farm land. Under a lease agreement, the city might purchase the irrigation equipment and the farmer supply the agricultural management and necessary labor for the irrigation system. Both the farmer and the city would benefit from such a lease agreement. The city would be relieved of the labor and management responsibility for the operation of the system. The farmer would receive the benefits of water and nutrients without the purchase of the irrigation equipment.

Irrigation equipment is eligible for grant funds; however, the eligible cost for state and federal participation in wastewater reuse systems on leased land cannot exceed the cost of land and equipment for land treatment systems.

Effective Date

April 27, 1978

Amended July 12, 1979

Effective Date

May 24, 1978

GRANT ELIGIBILITY — TRACTORS AND MOWERS

Missouri Clean Water Commission Policy No. 78-2

Policy

Funding for tractors and mowers will *not* be eligible for construction grant funding. However, funding for mowing equipment which has been obligated prior to April 27, 1978 (currently have funding priority for purchase of such equipment or have received staff approval of the specifications or change orders for the equipment) will be funded.

Discussion

The Commission feels very strongly that the intent of the construction grant program is to upgrade existing wastewater facilities or to construct new facilities to abate water pollution and comply with current effluent requirements. Missouri's currently known needs for such construction is approximately \$1.5 billion. At a funding level of \$125 million per year, it will take approximately 16 years to satisfy this need assuming a continued inflation rate of 8%±. Because of this tremendous need and minimum funding available, it is essential that the funding be used effectively. Applicants must demonstrate their sincerity to do their part in a spirit of cooperation. Therefore, the city should not expect state and federal funding assistance through the construction grants program for purchase of multiple use equipment such as tractors, mowers, trucks, etc. Many cities already have such equipment for other needs, and if they do not, it should be within their capability to purchase such items.

Effective Date

May 24, 1978

AUTHORIZATION FOR DIRECTOR OF STAFF TO SIGN CERTIFICATIONS

Missouri Clean Water Commission Policy No. 78-3

Policy

That the Director of Staff of the Clean Water Commission be authorized to sign the 301(i)(1) certifications to the Environmental Protection Agency.

Discussion

When a NPDES permit with a new compliance schedule is issued to a municipality, certification must be made to EPA that funds will be available to complete that project before the July 1, 1983, deadline. If the certification is not given, municipalities are subject to enforcement action.

Effective Date

October 26, 1978

GRANT ELIGIBILITY — LOCATING AND UNCOVERING MANHOLES

Missouri Clean Water Commission Policy No. 78-4

Policy

Funding for locating and uncovering manholes for inspection, and flow monitoring for infiltration and inflow analysis or sewer system evaluation surveys will not be eligible for grant participation. The city or the consulting engineer shall submit a certification that its grant request does not include funding for such work.

Discussion

The Commission feels very strongly that cities should have a routine maintenance program which includes inspection of manholes and raising to grade any manholes that may be covered as a result of paving operations, etc. If this type of a program is in effect, the manhole location should be known and should not require extra expense for locating and uncovering. As stated in previous memoranda, Missouri's needs for waste treatment works construction far exceed the amount of funding available. Therefore, the funds must be used in the most effective manner possible. Cities must make a sincere effort to do everything they possibly can to minimize their reliance on state and federal funding. A routine program as outlined above for manhole inspection and maintenance is just one example of an activity that a city can and should perform.

All grant requests received after November 30, 1978, must include the certification from the city or the consulting engineer that such grants do not include funding for locating and uncovering manholes.

Effective Date

November 30, 1978

Missouri Clean Water Commission Policy No. 78-5

Policy

Whenever municipalities propose water body crossings, full consideration of alternatives shall be explored. The Commission favors bridge crossings of major water bodies to underwater crossings for sewer lines if it provides protection for the waters of the state contemplated by the Missouri Clean Water Law and is economically feasible.

Effective Date

April 27, 1978

Regional population totals were disaggregated into facility planning areas by the designated 208 agencies as required by federal regulations. Since the total of these facility planning area projections must not exceed the total regional projections, an increase in the current projections for one facility planning area will usually require a corresponding decrease in the projections for other facility planning areas. Because of the multiple impacts of these projections, they can reasonably be expected to cause considerable controversy.

Effective Date

February 1, 1979

POPULATION PROJECTION WITHIN DESIGNATED 208 AREAS

Missouri Clean Water Commission Policy No. 79-1

Policy

The Clean Water Commission will be responsible to periodically provide regional population projection totals to the designated 208 agencies and to insure that disaggregated projections are used for facility planning in accordance with 40 CFR 35, Subpart E, Appendix A.

The designated 208 agencies will be responsible to disaggregate the Commission's regional population projection totals into facility planning areas.

Discussion

Regional population totals were disaggregated into facility planning areas by the designated 208 agencies as required by federal regulations. Since the total of these facility planning area projections must not exceed the total regional projections, an increase in the current projections for one facility planning area will usually require a corresponding decrease in the projections for other facility planning areas. Because of the multiple impacts of these projections, they can reasonably be expected to cause considerable controversy.

Effective Date

February 1, 1979

CONSTRUCTION GRANTS PRIORITY SYSTEM

Missouri Clean Water Commission Policy No. 79-2

Policy

For the purpose of distribution of state and federal grants to communities for the construction of wastewater treatment facilities, the Missouri Clean Water Commission annually shall prepare and distribute a proposed priority system which shall include the following:

1. Proposed Priority Rating Criteria — these criteria shall define a system for numerically rating projects on the basis of their anticipated environmental impact. These ratings shall be used to develop the proposed priority list.
2. Proposed Priority List — this list shall identify, in priority order, the projects which may anticipate receipt of state and federal grant funds for the following fiscal year.
3. Proposed Program Management — this document shall describe (1) administrative procedures to be used in changing or updating the priority list during the next fiscal year, (2) the relationship of 208 planning programs to these procedures, and (3) public participation activities required before changing or updating the priority list.

After receiving public input on these proposals, the Commission annually shall adopt a final priority system to be used during the following fiscal year. The priority system adopted shall become the Missouri Clean Water Commission policy for the next fiscal year.

Effective Date

July 12, 1979